ORDINANCE NO. 573 Bill No. 573

AN ORDINANCE ADOPTING CROSS CONNECTION CONTROL.

BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF WOOD HEIGHTS, AS FOLLOWS:

SECTION I

Cross Connection Control -- General Policy

A. Purpose. The purpose of this ordinance is:

1. To protect the public potable water supply from contamination or pollution by containing within the consumer's internal distribution system or private water system contaminants or pollutants which could backflow through the service connection into the public potable water supply system.

2. To promote the elimination, containment, isolation, or control of existing cross connections, actual or potential, between the public or consumer's potable water system and non-potable water systems, plumbing fixtures, and industrial process systems.

3. To provide for the maintenance of a continuing program of cross connection control which will systematically and effectively prevent the contamination or pollution of all potable water systems.

B. Application. This ordinance shall apply to all premises served by the public potable water system of the City of Wood Heights.

C. Policy. This ordinance will be reasonably interpreted by the water purveyor. It is the water purveyor's intent to recognize the varying degrees of hazard and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

The water purveyor shall be primarily responsible for protection of the public potable water distribution system from contamination of pollution due to backflow or contaminants or pollutants through the water service connection. The cooperation of all consumers is required to implement and maintain the program to control cross connections. The water purveyor and consumer are jointly responsible for preventing contamination of the water system.

If, in the judgment of the water purveyor or his

authorized representative, cross connection protection is required through either piping modification or installation of an approved backflow prevention device, due notice shall be given to the consumer. The consumer shall immediately comply by providing the required protection at his own expenses; and failure, refusal, or inability on the part of the consumer to provide such protection shall constitute grounds for discontinuing water service to the premises until such protection has been provided.

SECTION II

Definitions

A. The following definitions shall apply in the interpretation and enforcement of this ordinance:

1. "Air gap separation" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device and the overflow level rim of the receptacle, and shall be at least double the diameter of the supply pipe measured vertically above the flood level rim of the vessel, but in no case less than one inch.

2. "Auxiliary water supply" means any water source or system, other than the public water supply, that may be available in the building or premises.

3. "Backflow" means the flow other than the intended direction of flow, of any foreign liquids, gases, or substances into the distribution system of a public water supply.

4. "Backflow prevention device" means any device, method, or type of construction intended to prevent backflow into the distribution system of a public water supply.

5. "Consumer" means the owner or person in control of any premises supplied by or in any manner connected to a public water system.

6. "Containment" means protection of the public water supply by installing a cross connection control device or air gap separation on the main service line to a facility.

7. "Contamination" means an impairment of the quality of the water by sewage, process fluids, or other wastes to a degree which could create an actual hazard to the public health through poisoning of through spread of disease by exposure.

8. "Cross connection" means any physical link between a potable water supply and any other substance, fluid, or

source, which makes possible contamination of the potable water supply due to the reversal of flow of the water in the piping or distribution system.

9. "Hazard, Degree of" means an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water system.

a. Hazard, Health -- any condition, device, or practice in the water supply system and its operation which could create or may create a danger to the health and well-being of the water consumer.

b. Hazard, Plumbing -- a plumbing type cross connection in a consumer's potable water system that has not been properly protected by a vacuum breaker, air gap separation or backflow prevention device.

c. Hazard, Pollutional -- an actual or potential threat to the physical properties of the water system or to the potability of the public or the consumer's potable water system but which would constitute an nuisance or be aesthetically objectionable or could cause damage to the system or its appurtenances, but would not be dangerous to health.

d. Hazard, System -- an actual or potential threat of severe damage to the physical properties of the public potable water system or the consumer's potable water system, or of a pollution or contamination which would have a protracted effect on the quality of the potable water in the system.

10. "Industrial process system" means any system containing a fluid or solution, which may be chemically, biologically, or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system, pollutional, or plumbing hazard if introduced into a potable water supply.

11. "Isolation" means protection of a facility service line by installing a cross connection control device or air gap separation on an individual fixture, appurtenance, or system.

12. "Pollution" means the presence of any foreign substance (organic, inorganic, or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

13. "Public potable water system" means any publicly or

water use practices within his premises.

C. It shall be the responsibility of the water consumer to conduct periodic surveys of water use practices on his premises to determine whether there are actual or potential cross connections to his water system through which contaminants or pollutants could backflow into his or the public potable water system.

SECTION V

Type of Protection Required

A. The type of protection required by this ordinance shall depend on the degree of hazard which exists, as follows:

1. An approved air gap separation shall be installed where the public potable water system may be contaminated with substances that could cause a severe health hazard.

2. An approved air gap separation or an approved reduced pressure principle backflow prevention device shall be installed where the public potable water system may be contaminated with a substance that could cause a system or health hazard.

3. An approved air gap separation or an approved reduced pressure principle backflow prevention device or an approved double check valve assembly shall be installed where the public potable water system may be polluted with substances that could cause a pollutional hazard not dangerous to health.

SECTION VI

Where Protection is Required

A. An approved backflow prevention device shall be installed on each service line to a consumer's water system serving premises where, in the judgment of the water purveyor or the Missouri Department of Natural Resources, actual or potential hazards to the public potable water system exist. The type and degree of protection required shall be commensurate with the degree of hazard.

B. An approved air gap separation or reduced pressure principle backflow prevention device shall be installed at the service connection or within any premises where, in the judgment of the water purveyor or the Missouri Department of Natural Resources, the nature and extent of activities on the premises, or the materials used in connection with the activities, or materials stored on the premises, would present an immediate and dangerous hazard to health should a cross connection occur, even though such cross connection may

not exist at the time the backflow prevention device is required to be installed. This includes but is not limited to the following situations:

1. Premises having an auxiliary water supply, unless the quality of the auxiliary supply is acceptable to the water purveyor and the Missouri Department of Natural Resources.

2. Premises having internal cross connections that are not correctable, or intricate plumbing arrangements which made it impractical to ascertain whether or not cross connections exist.

3. Premises where entry is restricted so that inspection for cross connections cannot be made with sufficient frequency or at sufficiently short notice to assure the cross connections do not exist.

4. Premises having a repeated history of cross connections being established or reestablished.

5. Premises, which due to the nature of the enterprise therein, are subject to recurring modification or expansion.

6. Premises on which any substance is handled under pressure so as to permit entry into the public water supply, or where a cross connection could reasonably be expected to occur. This shall include the handling of process waters and cooling waters.

7. Premises where materials of a toxic or hazardous nature are handled such that if backsiphonage or backpressure should occur, a serious health hazard may result.

SECTION VII

Backflow Prevention Devices

A. Any backflow prevention device required by this ordinance shall be of a model or construction approved by the water purveyor and the Missouri Department of Natural Resources.

1. Air gap separation to be approved shall be at least twice the diameter of the supply pipe, measured vertically above the top rim of the vessel, but in no case less than one inch.

2. A double check valve assembly or a reduced pressure principle backflow prevention device shall be approved by the water purveyor, and shall appear on the current "list of approved backflow prevention devices" established by the Missouri Department of Natural Resources.

B. Existing backflow prevention devices approved by the

READ TWO TIMES AND PASSED THIS 9TH DAY OF FEBRUARY, 1993.

Melvin Carmichael Jr
Mayor and Chairman of the
Board of Aldermen, City of
Wood Heights, Missouri

ATTEST:

[signature]
City Clerk